Jog to Che Bruist

# A-TEK CONSULTANTS, INC.

3649 All American Blvd. Orlando, Florida 32810-4726 E-mail: atek@gdi.net

| DATE:     | 4-3-97TIME SENT: 9 A. M.              |
|-----------|---------------------------------------|
|           | LIVER THIS FAX TO: Philip Chooly      |
|           | OCATION: Winter Park                  |
| PHONE:    | 29-5945 FAX: 740-5289                 |
| Message ( | eference: MASTERLINK                  |
| Here      | been directed upward at Lockheed      |
| Martin 5  | To Greg Howard. Will advise progress. |
|           |                                       |
| 1 eti     | nitely will count on you for 4/26     |
|           | at 8 A.M. (Brian Patch)               |
|           |                                       |
|           | ES INCLUDING COVER PAGE: 3            |
| TOTAL PAG | ES INCLUDING COVER PAGE.              |
| FROM: Ke  | nt Welsner                            |

PHONE: (407) 299-3900 FAX: (407) 299-8200

E-mail: atek@gdi.net

Schitz Crosby • (A) Need strategic Perton that needs what we have got that is willing to do or found the product cooling. Must get strates or getting that code possibled out! Need journed help in bringing a fielled Martin Intelliper from to the 650,000? With Customer Whole exitently 200,000. Lets Star Good pound out to code a lot Any left level Contails at Inklud Martin ?? Core I Possible Stratege Parties CAMS renalbut Comi Gent a Soulfred Martin om Lette Marry How How Health Care 25 als year. Kame fon are into Health Care - ton you wordlatte for How wond you showing comme the confluence anter for I PM, such tent? observations you neget find what. 2 way street

# Confidential Physical Architecture for a Distributed Workflow Management System

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|---|---|
| The MasterLink agents are implemented as class marketed artificial intelligence products. The abrules or constraints to make a workflow manage  | Inference/Constraint Engine Libraries             |
|   | MasterLink Collaborative Agent Workflow Framework |
| The domain specific objects involved in a physimanagement application based on the MasterLithings as work management policy objectives, varies for MasterLink agents; task definitions, jowork schedule state transitions. These are specafolities maintenance domain; a home health domain | Vertical Domain Workflow Management Application   |

work targets in a classification heirarchy, h care domain, or an aircraft maintenance ciffed on a case by case basis, e.g. for ink framework. This includes such sical implementation of a workflow ob types, job state transitions, and

management application to be built. The ork. It is the generic representation of a ects referred to above and the workflow framework of classes supporting these asis for any domain specific

bility of a MasterLink agent to use a set of ement decision is based on this technology, ses that are derived from commercially

nature, existing wireless protocols may distributed objects to communicate of application objects can send

ry services, string handling, date/time ially available libraries for common

the application. At this point in time 2++ and Java. This is due to the , Orbs and Databases. f supporting the language and other off ally this is Unix or NT on servers, and desktop LAN connected client versus

MasterLink© Copyright 1997



April 16, 1997

Mr. Gregory A. Howard Business Development Manager Lockheed Martin Information Systems 12506 Lake Underhill Road, MP 830 Orlando, FL 32825-5002

RE: A-TEK/MasterLink® MEETING 4/11/97

Dear Greg:

Thank you for meeting with us last Friday. It provided the opportunity to present MasterLink® to you. We gave you two confidential copies of the MasterLink® design, system architecture, and component layer and shared with you our marketing strategy for the development of the MasterLink® software management package. Certainly we look forward to meeting again with you and members of your group as well as getting together with Mr. Garry Mann as you suggested.

You mentioned it would have been nice to have had Dennis Hummel present last Friday. We appreciated his expeditious handling of the proprietary information agreement and look forward to meeting him. We believe MasterLink® will have application in your project and very possibly in Mr. Hummel's area (the possibility of our intelligent component layer fitting into the projects). As promised John Hartman has completed the job states transition graphic and we will get it to you shortly along with the list that Garry Fenimore prepared that differentiates characteristics unique to MasterLink®, clearly separating it from the limitations inherent in current CMMS systems.

We wish to reiterate that the CMMS are data rich and are one dimensional. They do not have automated planning, scheduling, and dispatching. MasterLink® is multi-dimensional as we discussed and includes active planning, scheduling, dispatching plus other active agents, i.e. job manager. These all have dynamic inclusive policy (rules) to direct behavior of the system. This enables work flow decision automation and policy automation as we discussed.

We firmly believe MasterLink<sup>®</sup> fully developed and properly implemented, as we have suggested, will be an enormous contribution to the success quotient of Lockheed Martin.

The universal qualities of capacity and productivity enhancement would certainly contribute to the operating success of any organization.

We are looking forward to setting the mutually convenient date and time for our next meeting.

Kent A. Weisner

President

cc: Garry Fenimore
John Hartman

Lee Kitchen



April 21, 1997

Mr. Gregory A. Howard Business Development Manager Lockheed Martin Information Systems 12506 Lake Underhill Road, MP 830 Orlando, FL 32825-5002

Dear Greg:

Here is Garry Fenimore's rendering summarizing the problems in CMMS as promised. He would be glad to cover in detail why we are different if you wish at our next meeting. This is an excerpt from our initial white paper which of course has been evolving.

Very truly yours,

Kent A. Weisner

President

Encl.

## **ADDENDUM**

## **Benefits of Object Orientation**

When implemented correctly, the benefits of object orientation will be achieved. The key to successfully working with this technology is to understand how the technology is best applied. With vision and forethought, the benefits of object orientation are:

- Increased productivity.
- Save the time it takes to bring an application to market.
- Save development costs.
- Software can be reused in many applications.
- More reliable systems that require less maintenance.
- Software that is more flexible and extendable.
- Less complicated designs that follow a more natural method of thinking.

The biggest problems companies encounter when working with object oriented technology is:

- Not realizing that there are up-front costs before back-end benefits are achieved.
- That 'bang-for-the-buck' benefits stem from software reuse.
- That software reuse comes from building and/or purchasing a foundation of reusable software.
- Having knowledgeable personnel that understand the technology.

Businesses need to understand, that although there may be up-front costs, and a longer period of time is required to get the technology off the ground, at the end of the day, they will reap many benefits by using object oriented technology.



April 18, 1997

Mr. Philip Crosby Philip Crosby Associates II, Inc. 164 Palmer Avenue Winter Fark, FL 32789

Dear Phil:

Here is a two page general profile on CurranCare and another page written by Connie Curran, the C.E.O.

How Brothane Brown

Ken Kuhn her COO partner and Angela Scala her other partner will also be meeting with us Saturday morning April 26, 1997.

We will all meet you at the Briar Patch restaurant in Winter Park for breakfast at 8:00 a.m. and then slide over to the office.

Our primary goal and outcome is to secure CurranCare as a customer, strategic partner and investor in MasterLink<sup>®</sup>. They have signed the non-disclosure agreement.

They have a couple of big problems:

- 1. How to handle an increasingly diverse and dispersed work force.
- 2. How to increase the capacity of their management to handle their fast growing home care business.

Finished MasterLink® products would do both for them. The intelligent layer would get them going full speed and the whole system would put them in the home health care driver's seat. This is clearly a win-win and your help in bringing this one forward and perhaps in the barn is very much appreciated.

Thank you,

Very truly yours,

Kent A. Weisner

President

Imagine wrapping your services around your patient's care needs, from preadmission, to acute care, to post-acute and home care.

That's our vision for today's health care delivery system. We call this concept for market leadership,

# Wrap-Around Care TM

leader in home care management services. We believe the hospitals that will emerge as tomorrow's leaders will realign their resources and move to new venues to carry out their deeply held values and longstanding mission of caring for their community.

But hospitals have a limited time to expand their services beyond their walls. Future Medicare funding will probably change from the present cost-based formula that helps finance the building of an effective home care infrastructure to a prospective payment system.

Unfortunately, many hospitals have allowed traditional thinking about home care to hold them back from truly embracing the opportunity for patient services that today's home care market offers, and that tomorrow's market will demand.

We know what is possible because we have successful real world experience in bringing vigorous leadership to a hospital's home care services; experience in significantly driving up the quantity and quality of services, and improving patient, physician, and staff satisfaction. Oh yes, and providing a significant impact on the bottomline — success well beyond 4 to 6 percent improvements in home care's financial contribution to the organization.

## Benefits Beyond The Ordinary

The benefits of an effective home care program, especially in today's evolving marketplace, are dramatic in proportion, especially as a hospital leader looks at the many choices and options now facing an institution.

CurranCare believes the real story is that building an aggressive home care services operation can result in aligning system incentives and a comprehensive range of benefits such as: Our Mission:

To partner with

the health care

providers

to seize the

opportunities

inherent

in change

and to maximize

our abilities to

shape the future

of health care.

- · Improved clinical outcomes
- · Reduced length of stay
- · Reduced case costs
- Dominance in the home care market
- Greater ability to contract with managed care organizations
- Physician satisfaction
- Staff satisfaction from acquiring new skills and experience
- Reduced costs through the bridging of management salaries to the home care budget
- And an increase of millions in revenues

## The Time Is Now

Currently, Medicare uses a costbased reimbursement approach to home care. It's funding mechanism allows for coverage of related costs. It also allows hospitals to share resources with it's home care operation, allowing for transfer of administrative costs related to the home care program.

Experts believe that, within two to three years, the federal government will change these regulations and payment mechanisms. Medicare will most likely adopt a prospective payment method, making it very difficult for hospitals to optimize a home care infrastructure.

Another reason hospitals need to consider their role in their community's home care market is that the field is rapidly filling with competitors. In 1963, there were 1,100 home care providers. Today, there are 17,500, serving more than 7 million patients annually. Medicare enrollees alone doubled to 3.5 million in just the last five years.

Hospitals that wish to remain a focus of their community's health must quickly consider their home care strategy and move now.

## About CurranCare

CurranCare's executive leaders bring an unmatched depth of clinical, financial, managerial, consulting, executive skills and entrepreneurial spirit to designing and managing a client's home care program.

As strategic designers, Curran-Care seeks not to reengineer or restructure a program, but to work with the client to reconceptualize it's continuum of care. As strategic designers and managers, CurranCare helps clients create the strategic vision appropriate for their Wrap-Around Care<sup>TM</sup> services.

As managers of an institution's home care program, CurranCare's goal for it's clients is to help each achieve a significant competitive advantage in their marketplace. CurranCare will work with clients to optimize their program to achieve greater patient satisfaction, lower lengths of stay and case costs, and enriched skill sets for employees.

CurranCare utilizes such innovative techniques as bridge management and values-based recruiting, hospital-to-home care giving, information technologies and individual physician care plans to improve outcomes of care and reduce readmission rates.

CurranCare brings an energetic, catalytic approach to running home care programs. By aligning competing programs, individuals and incentives, and by optimizing an institution's providers and patients, CurranCare enables an institution to significantly raise the quantity and qualities of services provided to it's community.

Our expectation for each of our clients is rapid and immodest growth of home care and other Wrap-Around Care™ benefits.

## To Contact CurranCare

If you believe that the old model of care is changing from episodic treatment of diseased body parts on demand to a new model of being continually responsible for covered lives and the health status of your community, we would like to work with you on achieving your home care and other Wrap-Around Care™ goals.

If you would like to learn more about CurranCare and how we can help you lead your home care program to new heights of activity and effectiveness, please call us at 1.800.215.5221.

We look forward to talking to you soon.

## Our Values:

Respect... for all with whom we work; for the uniqueness of each organization, its values, traditions and potential; for diversity; for high ethical standards.

Responsiveness... to the opportunities presented by change; to market dynamics; to our clients; to technological innovation.

Results... better health care; improved skills for employees; improved services for physicians; lower case costs; increased revenues; maximization on investments for clients and shareholders.



Connie

Connie R. Curran, EdD, RN, FAAN

## On Risk-Taking and Role-Breaking

One of the most rewarding aspects of my professional life has been serving as a board member of a great community hospital. The leadership of this hospital regularly achieves new standards of best practice. They are consistently rated in "the best performing hospitals," they are the low-cost provider in their area and a market leader in managed care.

In 1995, this community hospital achieved incredible performances in home care. Home care moved from being a hospital department to being an essential service in aligning system incentives. Through various innovations and aggressive home care services, the hospital length of stay was further shortened. A new treatment region was developed that duplicated acute rehabilitation services in the home and provided hospital-based nurses to follow the patient home. This resulted in an average length of stay of 3.5 days for total joint patients. Because of these innovations, the hospital realized the lowest length of stay and case costs in the market, hospital-based employees acquired new skills in an area where work is plentiful, managers assumed responsibility for the continuum of care, and patients who would have been sent to a nursing home are now being cared for in their place of preference — home.



This community hospital has world-class executive leadership, whose drive, achievement, and vision are boundless. But I was curious about the staff nurses who volunteered to become part of the hospital-to-home program. What type of person would volunteer to move from their acute expertise to being novices in home care? With so many nurses lamenting change, I wondered who were these nurses

who welcomed change?

I interviewed three enthusiastic nurses who I would describe as risk-takers and role-breakers. All three had started their careers on medical-surgical units and later moved into critical care positions. The nurses consistently described the changes they were experiencing in acute care. They talked about the variations in average daily census, the downsizing and closing of medical-surgical and critical care units, and the uncertainty of a full 40 hours of employment each week. They also described the changes in caring for critical care patients who were so severely ill and lengths of stay so short that communication, bonding, and relationship building were often impossible. The nurses described the rewards of a true nurse-patient relationship, the power of communication, and the joys of participating in the patients' recovery. All three of them described a career commitment and the willingness to "go where the patients need me."

I asked them what role nursing leadership played in their decisions. They described a nursing department that "kept me educated about changes in the health care system," shared data regarding patients, census, finances, and identified the need for flexibility. They described their confidence that "the hospital would provide the education I needed to give good care in the home," and an employer who provided many opportunities to try things, but few sanctions if "I tried it and didn't like it." Each of them had developed their personal approach to blending hospital and home nursing. All three described the flexibility, autonomy, and extended time with the patient and family as the most rewarding parts of their new roles.

As we start this new year, let's resolve to create an environment for risk-taking and role-breaking. Nurses who demonstrate these abilities and leaders who empower their employees to "move to where the patients are..." are the individuals who will lead our organizations into the next millennium. Isn't that the real bottom line?\$

Note: Special thanks to Maggie Filec, Maureen Gardner, and Rosa Montenegro for sharing their experiences with mc, and allowing me to share them with you.



Sent via fax: 306-2641

CONFIDENTIAL

April 30, 1997

Mr. Gregory A. Howard Business Development Manager Lockheed Martin Information Systems 12506 Lake Underhill Road, MP 830 Orlando, FL 32825-5002

RE: MasterLink® Presentation

Dear Greg:

As requested: Job State Transitions Slide (see attached).

Adding to what we have already presented is inclusion of the thin client concept in our technical architecture plan. Thin client browser based interfaces to server allows corporations to go back to putting something inexpensive (affordable) on the desk or in the hand for needed information transfer and increased productivity. We would appreciate your sharing this additional information with Mr. Gary Mann. This should merit his attention. Could he join us for the meeting next week? We will wait to hear from you as both John Hartman and Gary Fenimore must make travel plans. Friday at 3:30 p.m. would be preferred by us.

Very truly yours,

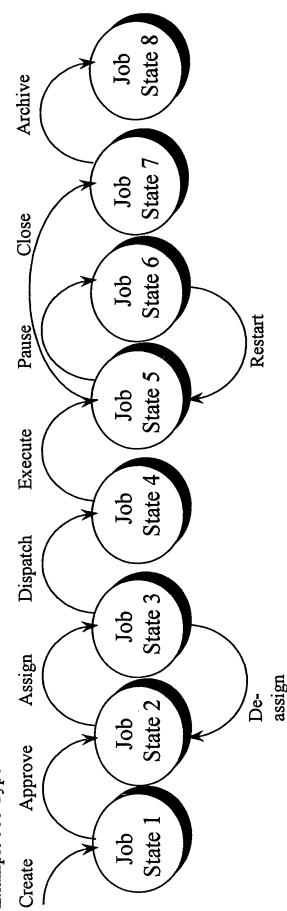
Kent A. Weisner

President

Encl.

# **TRANSITIONS** STATE JOB

Example Job Type



- A series of states and transitions will be defined for each "type" of job to be managed by the system.
- A set of businsess rules governing each possible transition will be determined. Analysis will include consideration for vertical domain classes.
- System agents will use sets of rules to automate selected transitions. External interfaces will support manual transitions and overrides.
- "Planner" agent will address the generation or creation of jobs containing planned tasks.
- "Scheduler" agent will address the assignment of jobs to resources and time.
- The worker, through a mobile device interface, will be the source for many transitions. "Dispatcher" agent will handle delivery of work schedules to resources.
- from the external interfaces (either GUI or system based), from the internal system agents, and from other "Job Manager" agent will act as a communications traffic cop receiving messages, representing events, MasterLink internal classes.

Subject: Phone notes text

Date: Thu, 08 May 97 10:51:00 PDT

From: "Hartman, John" < John\_Hartman@tvratings.com>

To: "'ATEK'" <atek@gdi.net>

Notes from 5/7/97 phone call with Randy Dougherty

The following notes are classified into categories of information. Most of this could be put in a letter of confirmation to Lockheed, and some of it is for our internal consumption.

## Preliminary Discussion

In setting up this phone call, Randy had told me that he was going to need to understand more about what we have produced up to this point in time. He pointed out that there is a lot more required to support a development effort than just the high level concepts represented in our PowerPoint presentation.

## Background Provided

The discussion started with an introduction of myself, and some background regarding how MasterLink the company, and MasterLink the concept, came to exist. I explained that Gary had a desire to create a solution for his needs as a Facilities Maintenance Manager after discovering that existing Computerized Maintenance Management Systems (CMMS) did not offer those solutions. Gary began to investigate modeling techniques and computer aided software engineering (CASE) tools, and during this time we met as I was also evaluating object oriented CASE tools for my projects. Over a short period of time he explained his desire to design a CMMS that would solve his problems and also potentially be a marketable product. Ultimately, I agreed to enter a partnership with Gary in which he would provide the CMMS domain expertise, and I would provide the technical expertise.

## Generic Framework Evolution

One of the basic tenets that Gary and I followed during the analysis and design for a CMMS was to take a process driven approach rather than a data driven approach. This was a large factor in why the existing CMMS products did not hit the mark. These were typically systems which provided a screen for entering what was originally a document or paper based record into a database. There was not a lot of program logic that performed any part of the maintenance management process. As we evolved the object oriented models we recognized the opportunity for abstractions related to the management of work flow associated with any mobile work force, not just specific to the facilities maintenance domain. From that point forward we adopted a framework approach to work / job flow management, which was to initially be focused in support of a facilities maintenance implementation. The framework is largely represented by the constructs reflected in the intelligent layer diagrams that are part of our presentations.

I related this information so that Randy would understand what we would want to take away from the relationship at the end of a project, and that as an example we might next seek to build a home health care implementation.

## Status of Design Efforts

I informed Randy that in addition to the cultivation of the concepts in our presentation that we have completed logical object oriented models for a facilities maintenance domain. This consisting of the following:

- Use cases and use case schemata

- Dictionary of facilities maintenance domain terms used in the models.
- Rational Rose 3.0 static object models.
- Rational Rose 3.0 object interaction diagrams.

I also described the small demonstration prototype which was meant to show how agent behaviors would be controlled through the maintenance of Policy. I went on to explain that we stopped the design process at this logical end point, in order to avoid making any physical implementation decisions prior to identifying strategic partnerships. This was so that we could best be prepared to integrate with any exisiting systems, and allow partners input to the technical architecture specification process. We also expected that any partner would have their own ideas regarding their job states, state transitions, and the rules governing those transitions which might lead to the identification of additional agents. I related that this analysis with a partner s domain representatives to define job types, their states and transitions, and the rules governing any transition to be implemented by a system agent would be one of the first major tasks once a project begins.

## Possible Business Cases

Randy indicated that his group s charter did not typically involve venture capital funding, and I indicated that most of the business planning and partnership scenario work has been done by Gary and Kent. I suggested that my own objectives would be served if we could enter an agreement which resulted in the construction of a Lockheed domain implementation that they would own, and that MasterLink be able to walk away with ownership of the framework components which would allow us to pursue additional vertical implementations. I proposed a scenario where Lockheed provides the development resources such as hardware, software, and software engineers while MasterLink would provide our intellectual property, logical design artifacts described above, and involvement on a consulting basis to the development project. We touched on my ability to be involved in such an endeavor while employed full time, and my response was that I would prefer an arrangement that would allow me to resign from my position here and that the same would probably be true for Gary. This was agreed to be an issue for discussion after we get a little further down the road, and may be related to the scope of the effort we might finally agree to pursue. seems to be a lot of latitude and flexibility on this type of scenario as opposed to one where they just give us a bunch of money and we deliver a finished product at a later date. We did not touch at all on the topic of oyalty or som<u>e ki</u>nd of compen<u>satio</u>n to MasterLink based on the use or licensing of the Lockheed implementation by their clients. This will have to be introduced later.

## Next Steps

I feel that Randy and I connected well, and that we were successful in taking him to the next level of interest and understanding. We agreed that the next step would be a two hour meeting in their offices, tentatively scheduled for Friday, May 30th. Randy stated that he would like us to focus on presenting more information and examples that would demonstrate how Masterlink would add value and functionality to a Maintenance Manager responsible for multiple sites and multiple types of jobs and mobile workers. He specifically expressed interest in examples of rulés to be implemented by agents in support of the Work Planning process. In addition, how these rules are related to Policy, and what benefits are to be gained from Policies and Rules. I asked Randy if he would submit a short problem statement which would be the basis for this presentation of MasterLink solutions and how it applies to solving Lockheed s problem. agreed to send that to me via Email. I agreed that with sufficient lead time I would provide a proposed agenda for this meeting to insure we would cover all of their interests.

05/08/97 11:08:09



Randy made it clear that they had already scheduled a meeting prior to May 30th with a Lockheed internal group that is involved with the implementation of intelligent agent technology as part of it s charter. Essentially, he wanted me to be aware that we would be in competition with that group in addressing Randy s needs. I guess we can consider this another form of compliment that we are in such elite company.

I intend to review the models associated with the Planner and make sure that it is in good shape to support this meeting s objectives. Gary could contribute to our preparation by attempting to identify work planning scenarios and potential rules involved in that process. Once I receive the problem statement I will forward that on so that our examples are focused on their domain as much as possible.

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twhirley.net-magic.net
          (post.office MTA v2.0 0813 ID# 0-12359) with SMTP id
AAA203;
          Sun, 18 May 1997 09:04:01 -0400
Received: from ptb335g-1.ipst.edu (ptb335g-1.ipst.edu
[199.77.233.148]) by iron.ipst.edu (8.6-IPST-2) with SMTP id
JAA09719; Sun, 18 May 1997 09:07:19 -0400
Message-Id: <3.0.32.19970518090829.0070aa70@pop.ipst.edu>
X-Sender: ewatkins@pop.ipst.edu
X-Mailer: Windows Eudora Pro Version 3.0 (32)
Date: Sun, 18 May 1997 09:08:31 -0400
To: West Ones <CARTERS-SOUTHWEST@WORLDNET.ATT.NET>,
        Mommy <70633.502@compuserve.com>, Jim DeGriz
<jpwhite@net-magic.net>,
        "Lil' Kristi & Co." <csanders@olympus.net>,
        Matteroni <matthew.estes@ipst.edu>,
        Husky Purple <robertaj@u.washington.edu>,
        Schmidty <gtd445a@prism.gatech.edu>, Droid
<droid@atl.mindspring.com>,
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        Golden One <joel.panek@ipst.edu>, Filraen
<102056.335@compuserve.com>,
        Fire Dude <davide@surfer.pcsonline.com>,
        "1's&0's hero" <srawls@net-magic.net>,
        Weirdo Steve <stephen.vanwinkle@ipst.edu>,
        Science <brian.boyer@ipst.edu>
From: "E. James Watkins" <eric.watkins@ipst.edu>
Subject: Z actual maintenance comp
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
X-Mozilla-Status: 0001
> >Here are some actual maintenance complaints submitted by US Air
Force
> >pilots and the replies from the maintenance crews. "Squawks" are
problem
> >listings that pilots generally leave for maintenance crews.
            "Left inside main tire almost needs replacement."
> >Problem:
> > Solution: "Almost replaced left inside main tire."
> >
> >Problem:
             "Test flight OK, except autoland very rough."
> >Solution: "Autoland not installed on this aircraft."
> >
> > Problem #1: "#2 Propeller seeping prop fluid."
> >Solution #1: "#2 Propeller seepage normal."
> >Problem #2: "#1, #3, and #4 propellers lack normal seepage."
> >
              "The autopilot doesn't."
> >Problem:
> > Signed off: "IT DOES NOW."
            "Something loose in cockpit."
> > Problem:
> >Solution: "Something tightened in cockpit."
> ">Problem:
            "Evidence of hydraulic leak on right main
> >landing gear."
> >Solution: "Evidence removed."
```

18

```
> >
             "DME volume unbelievably loud."
> > Problem:
> >Solution: "Volume set to more believable level."
> >Problem:
             "Dead bugs on windshield."
> >Solution: "Live bugs on order."
             "Autopilot in altitude hold mode produces a 200 fpm
> > Problem:
> >descent."
> >Solution: "Cannot reproduce problem on ground."
> > Problem: "IFF inoperative."
> >Solution: "IFF inoperative in OFF mode."
> >Problem:
             "Friction locks cause throttle levers to stick."
> >Solution: "That's what they're there for."
> > Problem: "Number three engine missing."
> >Solution: "Engine found on right wing after brief search."
```

\*\*\*\*\*\*\*P\*\*\*\*\*L\*\*\*\*\*A\*\*\*\*G\*\*\*\*\*A\*\*\*\*R\*\*\*I\*\*\*S\*\*\*\*M\*\*\*\*

Clouds just keep circling the earth around and around. And around. There is not much else to do.

Gator (Grrrowl!)



June 5, 1997

Sent via fax 407 306 4010

Mr. Randy Dougherty Manager, Logistics Info Systems Lockheed Martin Information Systems 12506 Lake Underhill Road, MP1270 Orlando, Fl. 32805-5005

Reference: MasterLink ©Software Design

**Technical Review** 

## **Dear Randy:**

We thank you, Gregory Harrison and Paul Kenney for meeting with us On May 30, 1997. Your response to our presentation was a positive indication to us of your keen interest and the potential contribution MasterLink can and will make to your developing projects.

Two things from you, would be self serving for you, and extremely helpful to us in moving forward in the interim before the latter part of July.

- 1. A letter from you documenting your comments that MasterLink has very good architecture that will fit long term projects and when completed will fit the criteria for short term projects as well (under COTS guidelines).
- 2. Another contact by you with John Hartman (813 738 3356) is in order for the following reasons: we intend to move forward and begin the encoding of MasterLink. In so doing we will have some of the prepatory work completed. We feel this would make a material contribution in producing a "demo for show" for your client.

Your assistance and guidance will be most appreciated.

Very truly yours.

Cc: Mr. John Hartman
Mr. Garry Fenimore



Subject: Text sent to SMS

Date: Tue, 24 Jun 97 11:35:00 PDT

From: "Hartman, John" < John Hartman@tvratings.com>

To: "'ATEK'" <atek@gdi.net>

MasterLink, the company, was founded to produce object oriented frameworks for the automation of mobile work force management.

The vision is based on three major components:

- The implementation, in software, of the real world active agents involved in all phases of the life cycle of a job. These include abstractions for all levels of the enterprise, e.g. Executives, Managers, Planners, Supervisors, Mobile Workers, and External Resources. These agents govern all aspects of work flow. This includes such functions as the automatic generation of planned jobs, the scheduling and assignment of jobs to the optimum resources, the dispatch of work to mobile workers, the collection of status information from the field force, and the ability to react to unplanned event jobs.
- ♣ The user defined control of the MasterLink active software agents through the establishment of sets of rules and definitions called Policy.

  Instances of Policy provide the basis for a rules based expert system, which implements the decisions associated with the various state transitions within a job s life cycle. Executives, through Policies, can have a direct effect upon the behavior of the system agents and in turn the mobile work force, providing yet another Link in the work delivery chain. This will empower Executive management to be able to adjust and adapt work flow policy and procedure through the system, and get a tangible measurement of the results of management strategies. Extensive management reporting, including what if analysis will aid managers in making Policy decisions.
- ♦ The use of wireless client server technology to establish the Link between the mobile worker and the resources of the knowledge base environment resident on the server. This active link will allow for delivery of just in time information to the mobile worker, and also for timely delivery of work status data back to the central server.

These three major components establish the MasterLink between management and a mobile work force, through the system and it s knowledge base. This will result in the following benefits being realized:

- Increased efficiency in every phase of a job life cycle.
- Reduced personnel requirements, allowing for expanded work load or redeployment of resources.
- Better equipped mobile work force.
- Improved mobile work force moral.
- More timely availability of information at all levels of the resource hierarchy.
- Improved customer satisfaction.
- New ability to implement a job management strategy based on analysis of results, heretofore not possible with current technology.

Facilities Maintenance Domain Differentiators

The following represents some of the concepts to be implemented for a Facilities Maintenance vertical domain. Most of the concepts will apply to many other mobile workforce applications.

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